



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,619	04/21/2006	Maximilian Tschernitz	2003P15803	4325
24131 7590 01/17/2008 LERNER GREENBERG STEMER LLP P O BOX 2480 HOLLYWOOD, FL 33022-2480			EXAMINER GLENN, KIMBERLY E	
			ART UNIT 2817	PAPER NUMBER
			MAIL DATE 01/17/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/576,619

Applicant(s)

TSCHERNITZ, MAXIMILIAN

Examiner

Kimberly E. Glenn

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 15,16 and 18-20 22 24-37 39 41-50 is/are rejected.
- 7) ☐ Claim(s) 17,21,23,38 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/21/06 & 5/18/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15, 18, 19, 32, 35, 36 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Furuya et al US Patent 6,127,907.

Furuya et al disclose a high frequency filter comprising a dielectric , cylindrical resonator 32 , two lines 34 for supplying electromagnetic waves from the dielectric resonators 32 , the lines 34 are formed on the surface of the substrate 31; wherein said resonators are supported in the substrate 31, the resonator is spaced from two microstrip lines 34 and the substrate is from with a recesses and the resonators are held in the recesses by way of securing means. The securing means is an adhesive. The recesses are dimensioned to enable mounting of the resonators. The high filter is used in a radar system. The substrate 31 can also be considered to a retention area (claim 32) (column 11; line 53- column 12; line 56)

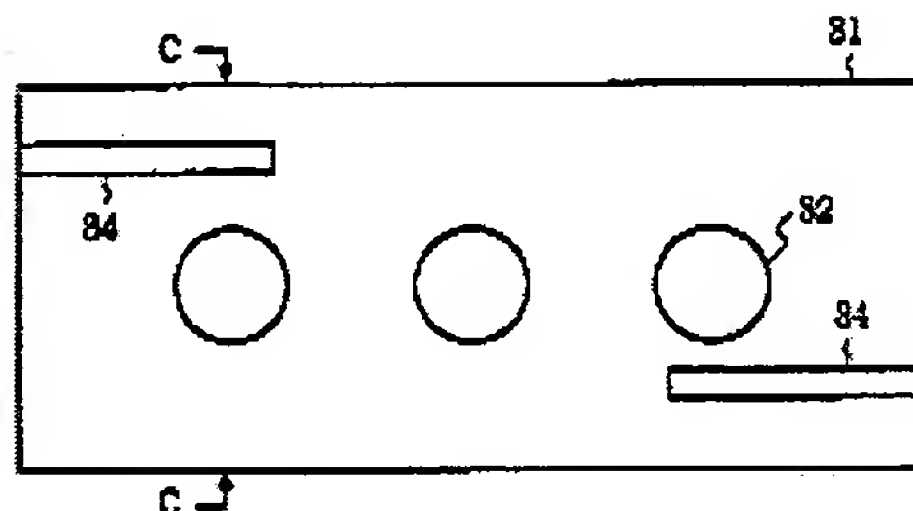


FIG. 11

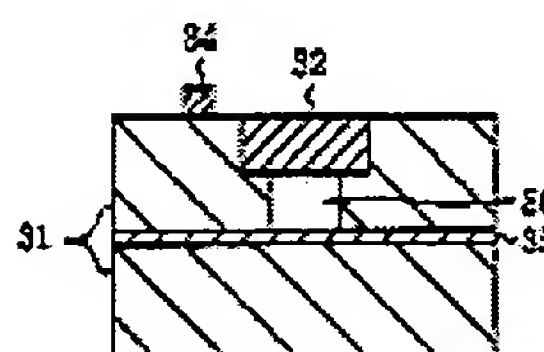


FIG. 12

Claims 15, 16, 18, 20, 22, 24, 28, 30-33, 35, 37, 39, 41, 45 and 47-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al US Patent 6,480,078.

Kim et al discloses in figure 7 a band pass filter element comprising: a dielectric, cylindrical resonators 102a; one or more microstrip lines 108 for supplying or drawing off electromagnetic waves to or from said dielectric resonators; a retention area or substrate (the dielectric resonator substrate 102b) disposed in close proximity to said lines 108; said resonators 102a being held in place by said retention area 102b; said resonators 102a are variably spaced from said lines; and said retention area 102b being formed with recesses, wherein said resonators are held by way of connection lines 103. The recesses are dimensioned to enable mounting of the resonators.

FIG. 2

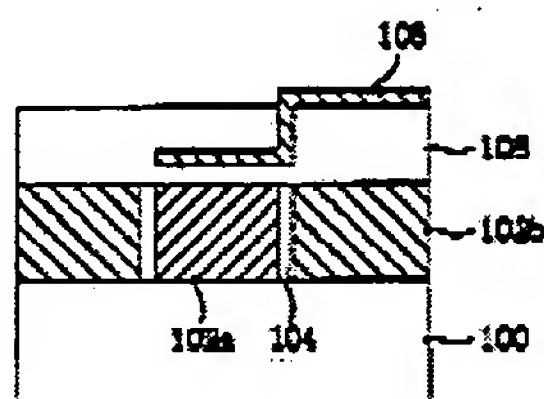
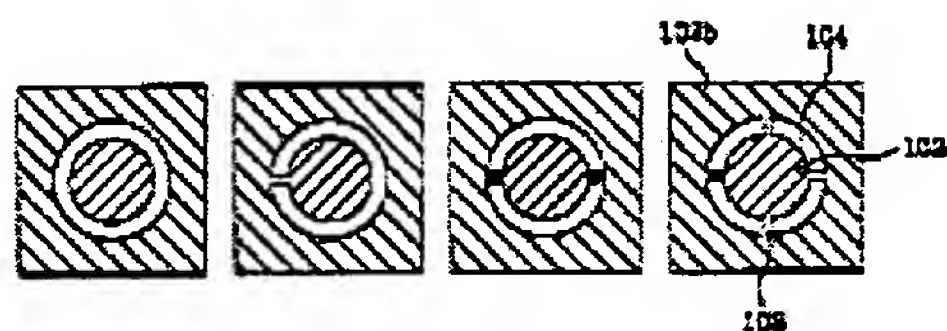


FIG. 4



The one or more microstrip lines 108 are formed by a straight section and a curved (sickle) section. Examiner considers the curved section to be the contacting structure. The microstrip lines have an angle less than 360 degrees. The microstrip lines have a larger dimension than the dimension of the resonators. The resonators are centered relative to the microstrip lines. (Column 3; line 33 -column 4; line 45)

FIG. 5

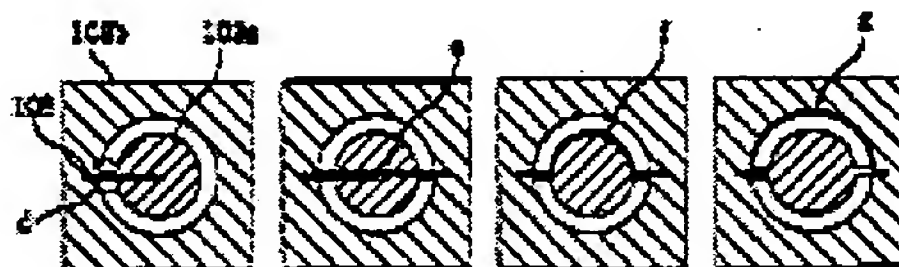
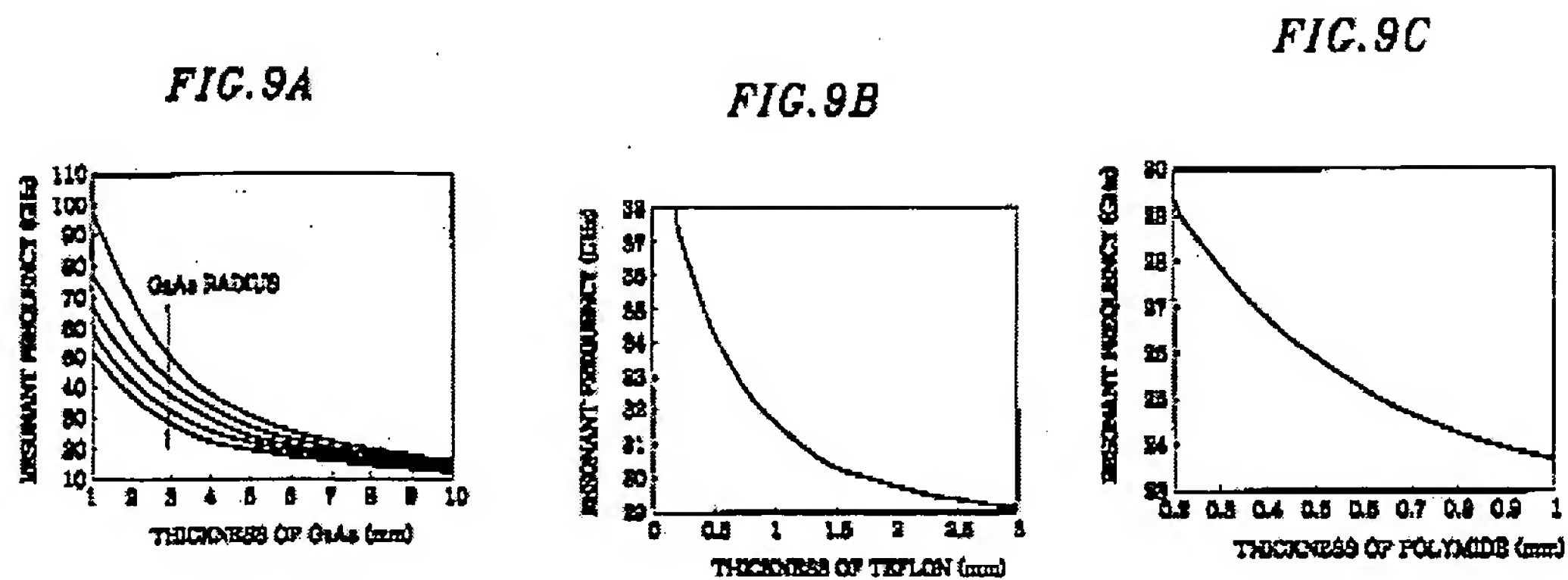


Figure 9A, 9B and 9C shown the resonant frequency can be greater than 18 GHz based on the thickness of the dielectric resonators. (Column 5; lines 34 - column 6; line 7)



The resonators are useful in mobile and satellite communication fields.

(Column 1; lines 17-20)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25-27, 29, 42-44 and 46 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Kim ET al US Patent 6,480,078.

See the above 35U.S.C 102(b) rejection for a discussion of the Kim et al reference.

Thus, Kim et al is shown to teach all the limitations of the claims with the exception of the one or more microstrip lines having an aperture angle of 160, 110 or 75 degrees or the microstrip lines dimension being smaller than the dimensions of the resonator.

It would have been obvious to one having ordinary skill in the art to make the aperture angle be 160, 110 or 75 degrees or the dimension of the line smaller than the dimension of the resonators, since such a modification would have involved a mere change in the size of the lines. A change in size is generally recognized as being within the level of ordinary skill in the art.

Allowable Subject Matter

Claims 17, 21, 23, 38 and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Shinkawa et al US Patent 4,307,352 discloses a microstrip oscillator with dielectric resonators (figure 9),

Rouger et al US Patent 4,835,498 discloses a tunable filtering device with dielectric resonators (figure 6),

Ishigaka et al US Patent 6,249,196 discloses a resonator for uniformly varying inductance (figure 5) and

Pance US Patent 7,310,031 discloses a dielectric resonator circuit (figures 14 and 15A).

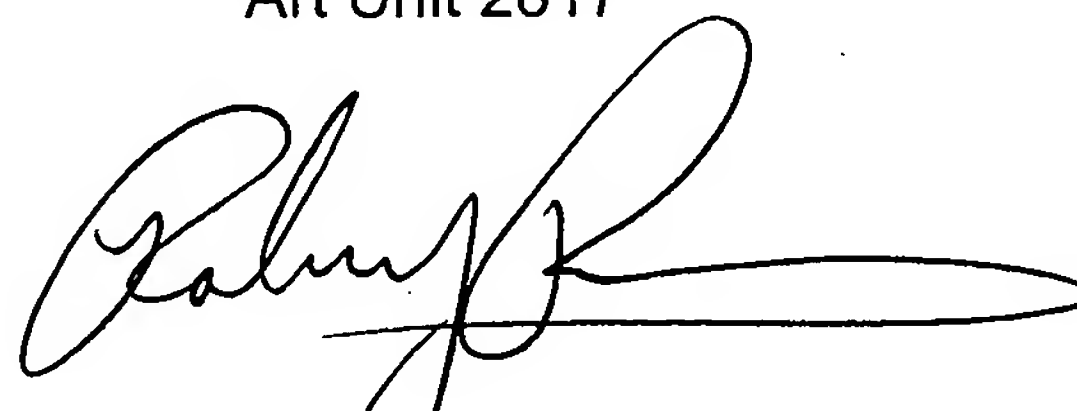
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly E. Glenn whose telephone number is (571)-272-1761. The examiner can normally be reached on Monday-Friday 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimberly E Glenn
Examiner
Art Unit 2817

20080115 keg



Robert J. Pascal
SPE 2817